

# LRFD

**Section 5.2** 

Revised: May 2006

**CLICK HERE** 

March 11, 2005

**Subject:** Practical Design Initiative

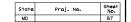
Intermediate encased pile cap bents

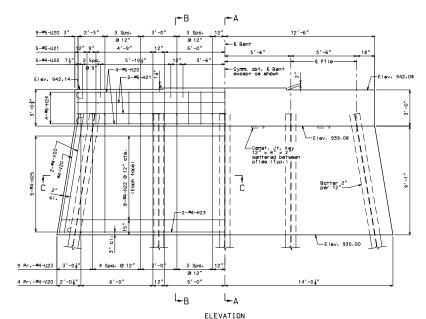
A designer may consider the use of encased pile cap bents for intermediate bents as shown in the attached example.

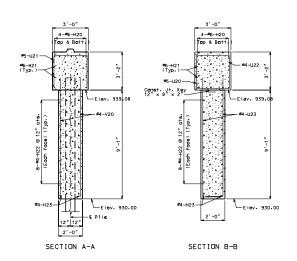
Encased pile cap bents could prove to be an economical structurally desired bent for the following conditions:

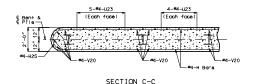
- The encasement would be beneficial at locations where drift is a concern.
- The encasement would also assist in providing a larger radius of gyration and therefore a decrease in buckling potential for locations where the exposed unbraced column length is large.

If this type of intermediate bent is being considered, the structural project manager or structural liaison engineer should be consulted regarding battering of piles and other details of the proposed installation.









Notes: For details of Intermediate Bent No. 2 not shown, see Sheet No. 8.

For Substructure Quantity Table for Bent No. 2, see Sheet No. 8.

DETAILS OF INTERMEDIATE BENT NO. 2







Date: Jan. 03, 2006

Subject: Office Practice Memorandums

Hardcopies of Office Practice Memorandums should be filed in your LRFD Bridge Design Guidelines under Section 5.2.

## Attachments:

OP5

Jan. 03, 2006

**Subject:** Practical Design Initiative

Omitting bridge approach slabs for projects on low-traffic routes.

Office Practice No. 5 supersedes Office Practice No. 4 dated March 15, 2005

The following provides interim guidance for when it is appropriate to omit bridge approach slabs that would have otherwise be considered standard for projects. This information is being disseminated in this form to provide information to meet the immediate needs of MoDOT staff. This decision was made at the "Cast Driving Policies" meeting held Oct. 18, 2005.

The following guideline should be used for new projects where the design has not been started, and also for the review and/or re-design of individual projects involved in the current Practical Design effort.

#### **Guideline for Omitting Bridge Approach Slabs**

Bridge approach slabs shall be omitted on minor routes..

When the approach slab is omitted, the standard details for bridge abutments and end bents shown in the Bridge Manual, including the customary corbel along the fill face of the end bents will continue to be used.

If a situation exists based on the conditions of the individual project where it is advisable or advantageous to vary from the above guidelines based on good engineering practice, submit a Design Exception with the design reasoning to the Bridge Division for documentation purposes and approval.

Date: March 31, 2006

Subject: Office Practice Memorandums

Hardcopies of Office Practice Memorandums should be filed in your LRFD Bridge Design Guidelines under Section 5.2.

#### Attachments:

OP6

Note: Current Active Office Practices: OP1 and OP6 (All other Office Practices shall be considered voided.)

March 31, 2006

**Subject:** Practical Design Initiative

Omitting bridge approach slabs for projects on low-traffic routes.

Office Practice No. 6 supersedes Office Practice No. 5 dated January 03, 2006

The following provides interim guidance for when it is appropriate to omit bridge approach slabs that would have otherwise be considered standard for projects. This information is being disseminated in this form to provide information to meet the immediate needs of MoDOT staff. This decision was made at the "Cost Driving Policies" meeting held Oct. 18, 2005.

The following guideline should be used for new projects where the design has not been started, and also for the review and/or re-design of individual projects involved in the current Practical Design effort.

#### **Guideline for Omitting Bridge Approach Slabs**

Bridge approach slabs shall be omitted on minor routes.

When the approach slab is omitted, the customary corbel or approach notch will also be omitted. All standard details for bridge abutments and end bents shown in the Bridge Manual shall be modified for the eliminated corbel or reduced abutment size.

If a situation exists based on the conditions of the individual project where it is advisable or advantageous to vary from the above guidelines based on good engineering practice, submit a Design Exception with the design reasoning to the Bridge Division for documentation purposes and approval.